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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,601	02/12/2004	Daniel Alvarez	CIS0208US	4921

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EXAMINER	
PHUNKULH, BOB A	
ART UNIT	**PAPER NUMBER**
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/777,601	ALVAREZ ET AL.	
	Examiner	Art Unit	
	Bob A. Phunkulh	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/12/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by WATKINSON (US 2004/0122890).

Regarding claim 1, *WATKINSON* discloses a method comprising:

receiving a first multicast routing protocol (MRP) message, wherein the first MRP message is a request to join a multicast group (see paragraph [0005]);

translating the first MRP message into a second MRP message,

wherein the second MRP message is a request to join the multicast group of receivers to which data is being provided by a specific source (see paragraph [0005]).

Regarding claim 2, *WATKINSON* discloses the receiving and the translating are performed by a rendezvous point (RP) router (a router, see paragraphs [0028, 0052]).

Regarding claim 3, *WATKINSON* discloses the receiving and the translating are performed by a router positioned in a communication path over which the MRP message travels to reach an RP (paragraph [0042]).

Regarding claim 4, *WATKINSON* discloses the RP router is contained in a first network that operates according to a first multicast routing protocol, wherein the specific source is contained in a second network that operates according to a second multicast routing operating protocol, and wherein the first and second multicast routing operating protocols are different from each other (see paragraphs [0043, 0052]).

Regarding claim 5, *WATKINSON* discloses the first network contains a plurality of routers including the RP router, wherein the second network contains a plurality of routers, and wherein the RP router is positioned within the first network such that data transmitted by RP router to the second network does not pass through another router of the first network (see paragraphs [0043, 0052]).

Regarding claim 6, *WATKINSON* discloses the RP router transmitting the second MRP message to the second network; creating a first communication path between the specific source and a receiver in the first network after the router transmits the second MRP message, wherein the first communication path does not include the RP router; transmitting data from the specific source to the receiver via the first communication path (see paragraphs [0043, 0052]).

Regarding claim 7, *WATKINSON* discloses creating a second communication path between the specific source and the receiver after data is transmitted from the specific source to the receiver via the first communication path, wherein the RP router is not included in the second communication path; transmitting more data from the specific source to the receiver via the second communication path (shortest-path tree (SPT), see paragraphs [0043, 0044]).

Regarding claim 8, *WATKINSON* discloses translating comprises: inputting first data into a look-up table (LUT), wherein the first data comprises an identity of the multicast group of receivers; the LUT outputting second data in response to inputting first data, wherein the second data comprises an identity of the specific source (the router comprises a table, see paragraph [0028, 0038]).

Regarding claim 9, *WATKINSON* discloses the LUT can be stored in memory of the device that translates the first MRP message into the second MRP message or stored in remote memory accessible using a communication protocol (inherent feature, see paragraph [0049]).

Regarding claim 10, *WATKINSON* discloses the router is contained in a sparse mode (SM) communication network and wherein the second MRP message is

configured for subsequent transmission to a source specific mode (SSM) communication network (see paragraph [0043]).

Regarding claim 11, *WATKINSON* discloses an apparatus comprising:

a processor; a first memory coupled to the processor, wherein the first memory stores instructions executable by the processor; wherein the processor implements a method in response to executing the instructions, the method comprising:

translating a first MRP message into a second MRP message, wherein the first MRP message is a request to join a multicast group of receivers, and wherein the second MRP message is a request to join the multicast group of receivers to which data is being provided by a specific source (see paragraph [0005]).

Regarding claim 12, *WATKINSON* discloses an apparatus comprising:

means for receiving a first multicast routing protocol (MRP) message, wherein the first MRP message is a request to join a multicast group of receivers (see paragraph [0005]);

means for translating the first MRP message into a second MRP message, wherein the second MRP message is a request to join the multicast group of receivers to which data is being provided by a specific source (paragraph [0005]).

Regarding claim 13, *WATKINSON* discloses a memory medium storing instructions readable and executable by a router comprising a processor, wherein the

router performs a method in response to executing the instructions, the method comprising:

translating a first MRP message into a second MRP message, wherein the first MRP message is a request to join a multicast group of receivers, and wherein the second MRP message is a request to join the multicast group of receivers to which data is being provided by a specific source (see paragraph [0005]).

Regarding claim 14, *WATKINSON* discloses the router is defined by a rendezvous point (RP) router (a router, see paragraph [0028, 0038]).

Regarding claim 15, *WATKINSON* discloses the RP router is contained in a first network that operates according to a first multicast routing protocol, wherein the specific source is contained in a second network that operates according to a second multicast routing operating protocol, and wherein the first and second multicast routing operating protocols are different from each other (see paragraph [0042]).

Regarding claim 16, *WATKINSON* discloses the first network contains a plurality of routers including the RP router, wherein the second network contains a plurality of routers, and wherein the RP router is positioned within the first network such that data transmitted by RP router to the second network does not pass through another router of the first network (see paragraph [0052]).

Regarding claim 17, *WATKINSON* discloses the RP router transmitting the second MRP message to the second network; creating a first communication path between the specific source and a receiver in the first network after the RP router transmits the second MRP message, wherein the first communication path does not include the RP router; transmitting data from the specific source to the receiver via the first communication path (see paragraph [0043]).

Regarding claim 18, *WATKINSON* discloses the method further comprises: creating a second communication path between the specific source and the receiver after data is transmitted from the specific source to the receiver via the first communication path, wherein the RP router is not included in the second communication path; transmitting more data from the specific source to the receiver via the second communication path (shortest-path tree (SPT), see paragraphs [0043, 0044]).

Regarding claim 19, *WATKINSON* discloses translating comprises: inputting first data into a look-up table (LUT), wherein the first data comprises an identity of the multicast group of receivers; the LUT outputting second data in response to inputting first data, wherein the second data comprises an identity of the specific source (the router comprises of a table, see paragraph [0028]).

Regarding claim 20, the router is contained in a sparse mode (SM) communication network and wherein the second MRP message is configured for subsequent transmission to a source specific mode (SSM) communication network (see paragraph [0043]).

Conclusion

Any response to this action should be mailed to:

The following address mail to be delivered by the United States Postal Service (USPS) only:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

The following address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, Hand Delivery, etc.) as follow:

U.S. Patent and Trademark Office
220 20th Street South
Customer Window, Mail Stop _____
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571)**

272-3083. The examiner can normally be reached on Monday-Tursday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Jay Patel**, can be reach on **(571) 272-2988.** The fax phone number for this group is **(571) 273-8300.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bob A. Phunkulh
Primary Examiner
TC 2600
Technology Division 2616
June 22, 2007

BOB PHUNKULH
PRIMARY EXAMINER